

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A lip seal for sealing a gap between a housing and an outer surface of a shaft in combination with the shaft, comprising:

~~a shaft having an outer surface;~~

a supporting body, the supporting body having an annular part oriented radially to the shaft and a cylindrical part running axially to the shaft, the annular part having two opposing sides;

a static sealing element attached to the supporting body, the static sealing element being made of a first material; and

[[a]] an elastomeric dynamic sealing element attached to the supporting body, the dynamic sealing element forming a lip that is deformed to curve in a direction of a space to be sealed off or in a direction of an exterior environment upon directly contacting the outer surface of the shaft such that the lip lays over the outer surface of the shaft, and being made of a second material the elastomeric dynamic sealing element having higher thermal stability than the first material of the static sealing element;

the dynamic sealing element being fastened to the annular part and enclosing the annular part on the two opposing sides at a fastening point;

the static sealing element being positioned on the cylindrical part at a radial distance from the dynamic sealing element.

2. (Original) The lip seal as recited in claim 1 wherein the supporting body is made from a rigid material.

3. (Original) The lip seal as recited in claim 2 wherein the rigid material is metal.

4. (Original) The lip seal as recited in claim 1 wherein the radial distance between the static sealing element and the dynamic sealing element is at least 0.5 mm.

5. (Original) The lip seal as recited in claim 1 wherein the static and dynamic sealing elements are connected to the supporting body by vulcanization using a coupling agent.

6. (Currently Amended) The lip seal as recited in claim 1 wherein the dynamic sealing element ~~receives~~ is deformed to form ~~the lip shape~~ [[a]] the lip shape during sliding of the seal onto the shaft.

7. (Currently Amended) The lip seal as recited in claim 1 wherein the ~~dynamic sealing element has a lip enclosing~~ encloses the shaft, the lip ~~having~~ has a lip surface facing the shaft, and wherein the lip is provided with openings on the lip surface for return delivery of a medium to be sealed off.

8. (Original) The lip seal as recited in claim 1 the dynamic sealing element has a lip edge with a barrier feature.

9. (Original) The lip seal as recited in claim 1 wherein the dynamic sealing element has a surface facing away from the shaft, the surface having concentric or screw-shaped openings.

10. (Original) The lip seal as recited in claim 9 wherein the openings are single-threaded or multiple-threaded.

11. (Cancelled)

12. (Original) The lip seal as recited in claim 1 wherein the static sealing element has at least one of an end chamfer and a bottom chamfer on an outside surface.

13. (Previously Presented) The lip seal as recited in claim 1 wherein the static sealing element has an outside surface, the outside surface being corrugated.

14. (Original) The lip seal as recited in claim 1 further comprising a sensor attached to the housing and a sensor wheel or a multipole wheel on the shaft interacting with the sensor.

15. (Cancelled)

16. (Currently Amended) A method for sealing a gap between a housing and a shaft using a lip seal, the lip seal having a supporting body, the supporting body having an annular part oriented radially to the shaft and a cylindrical part running axially to the shaft, the annular part having two opposing sides, the lip seal further having a static sealing element attached to the supporting body and a dynamic sealing element attached to the supporting body, the dynamic sealing element being made of [[a]] an elastomeric material having a higher thermal stability than the static sealing element, the dynamic sealing element being fastened to the annular part and enclosing the annular part on the two opposing sides at a fastening point and the static sealing element being positioned on the cylindrical part at a radial distance from the dynamic sealing element; the method comprising the steps of:

contacting the housing with the static sealing element; and

contacting the shaft directly with the dynamic sealing element to form a lip that is deformed to curve in a direction of a space to be sealed off or in a direction of an exterior environment.

17. (Previously Presented) The lip seal as recited in claim 1 wherein the dynamic sealing element includes flourorubber.

18. (Previously Presented) The lip seal as recited in claim 1 wherein the dynamic sealing element includes waxes or paraffin.

19. (Previously Presented) The lip seal as recited in claim 1 wherein the static sealing element includes a thermoplastic.

20. (Previously Presented) The lip seal as recited in claim 1 wherein the dynamic sealing element and static sealing element are colored differently.

21. (Previously Presented) The method as recited in claim 16 wherein the contacting the shaft step includes sliding the dynamic sealing element axially over the shaft so that a lip of the dynamic sealing element directly contacts the shaft.

22. (Currently Amended) A lip seal for sealing a gap between a housing and a shaft comprising:

a supporting body, the supporting body having an annular part oriented radially to the shaft and a cylindrical part running axially to the shaft, the annular part having two opposing sides;

a static sealing element attached to the supporting body, the static sealing element being made of a first material; and

a dynamic sealing element attached to the supporting body and directly contacting the shaft, the dynamic sealing element being made of a second material having a higher thermal stability than the first material;

the dynamic sealing element being fastened to the annular part and enclosing the annular part on the two opposing sides at a fastening point;

the static sealing element being positioned on the cylindrical part at a radial distance from the dynamic sealing element;

the dynamic sealing element ~~having~~ forming a lip enclosing the shaft upon direct contact with the shaft, the lip having a lip surface facing the shaft, and wherein the lip is provided with openings on the lip surface for return delivery of a medium to be sealed off.

23. (New) The lip seal according to claim 1, wherein the static sealing element completely envelopes the two opposing sides of the cylindrical part running axially to the shaft.